ISG Provider Lens™

Multi Public Cloud Services

SAP HANA Infrastructure Services

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of:

aws

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ISG Provider Lens™

Multi Public Cloud Services

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | DECEMBER 2023 | U.S.

SAP HANA Infrastructure Services

Who Should Read This Section

This report is relevant to enterprises across industries in the U.S. evaluating providers of SAP HANA infrastructure services for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant, ISG highlights the current market positioning of these U.S. providers based on the depth of their service offerings and market presence.

Businesses are becoming more assured in adopting public cloud infrastructure, primarily due to improved data security and cost-efficiency. Enterprises encounter difficulties in managing vital workloads, particularly those associated with the SAP product line, due to challenges related to data handling, change management and a shortage of skilled personnel. Consequently, there is an increasing reliance on third-party applications that can be seamlessly integrated with SAP S/4 HANA. The expanding wave of digital transformation initiatives prompts enterprises to emphasize

cost reduction, agility, security and industry-specific solutions when migrating SAP workloads.

In 2023, it is noteworthy that providers dedicated resources toward establishing an infrastructure platform that boasts exceptional security, reliability and performance. There has been a growing emphasis on providing tools and services to facilitate the smooth migration of enterprise SAP workloads to cloud platforms. Integrating cutting-edge technologies such as AI and ML into their services enables providers to assist clients in modernizing their SAP applications and enhancing their overall business value.

IT leaders should read this report to better understand SAP HANA infrastructure service providers' relative strengths and weaknesses and learn how their market approaches impact enterprise public cloud strategies.

Software development and technology leaders should read this report to understand the relative positioning and capabilities of SAP HANA infrastructure providers, helping them procure infrastructure and services to migrate their workloads to public cloud platforms.

Sourcing, procurement and vendor management professionals should read this report to better understand the current landscape of SAP HANA infrastructure service providers in the U.S. market.

ISG Provider Lens™

Source: ISG RESEARCH

Multi Public Cloud Services
SAP HANA Infrastructure Services

U.S. 2023

PORTFOLIO ATTRACTIVENESS

Product Challenger

Virtustream

SAP

IBM

● AWS

● Microsoft

● Google

Leader

Contender

T-Systems

Alibaba

OVHcloud

Market Challenger

COMPETITIVE STRENGTH

★ Rising Star
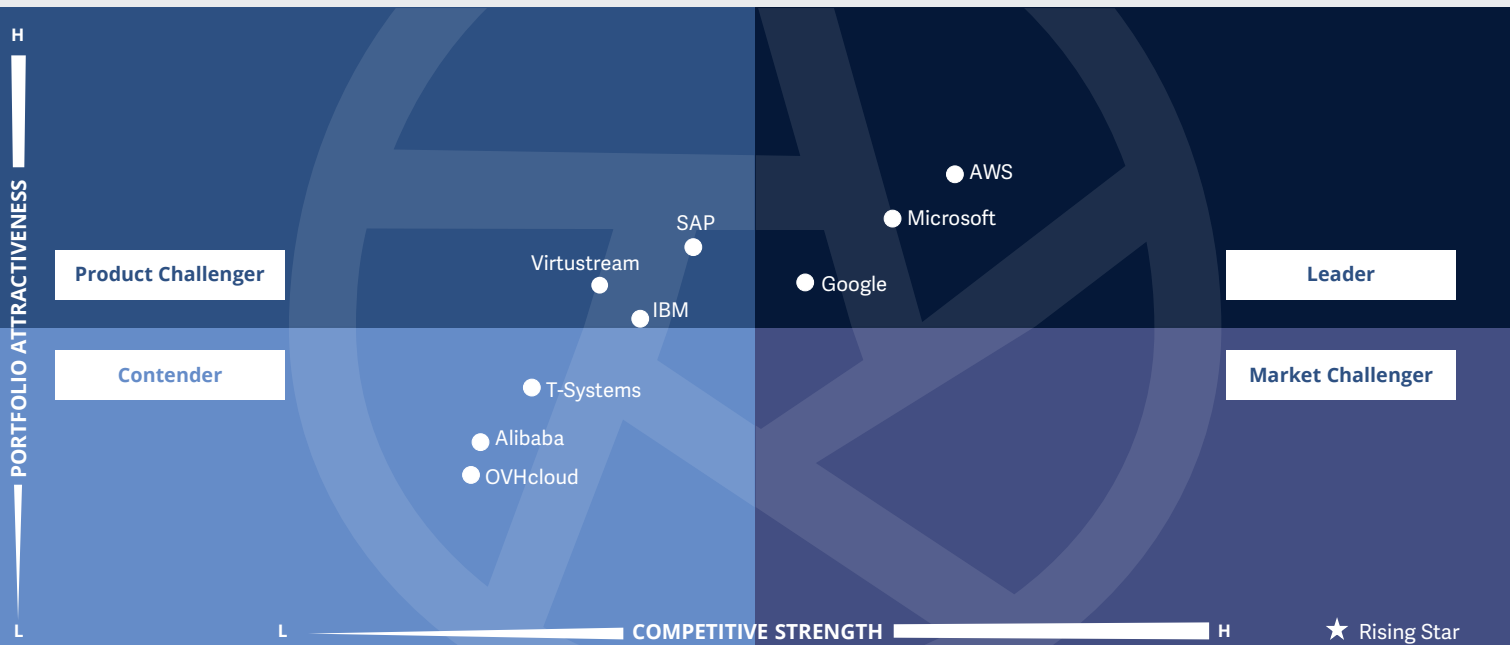
The quadrant evaluates service providers offering **SAP product** hosting, particularly SAP S/4HANA, within public cloud shared environments, utilizing **SAP-certified infrastructure** and standard services.

Shashank Rajmane

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have

a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions.

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices,** consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications,** with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization.

Observations

With the recent increase in demand for migrating mission-critical workloads to cloud environments, more enterprises are experimenting with various combinations of cloud and taking significant risks to become more agile. ISG observes enterprises wanting to rapidly move their SAP applications and workloads to the public cloud. Enterprises must also check partner credentials and migration automation tools while choosing their cloud platform to achieve the desired results. The SAP HANA Infrastructure Services provides numerous advancements, especially pertaining to hyperscalers. The top hyperscalers in this space offer automated tools to accelerate RISE with SAP migrations, providing a safe path for hesitating customers and anything that can help seamlessly migrate SAP workloads to their environments. SAP continues to push the RISE with SAP initiative, accelerating cloud migrations. However, typical SAP clients have more than SAP S/4HANA. They simultaneously use legacy ERPs, analytics tools, data warehouses, sales and service automation, CRM, e-commerce, HCM and other SAP or competitors' products. The U.S. market in this domain remains a battle between AWS and Microsoft Azure. Google Cloud took a price-competitive approach but had limited success. The overall SAP HANA Infrastructure Services will almost certainly continue to grow even further in the coming years, where enterprises will slowly move all their large instances and workloads with complex environments to the public cloud environments.

From the 57 companies assessed for this study, nine have qualified for this quadrant, with three being Leaders.

AWS

AWS offers extensive services for hosting SAP workloads to U.S. clients. Its Launch Wizard for SAP empowers clients to automate S/4HANA deployment efficiently, and the ProServe for SAP offering enables seamless migration to the public cloud with reduced operational costs.

Google

Google excels in delivering virtualized architecture and aiding clients in optimizing their SAP landscape, enhancing infrastructure performance and enabling real-time insights through its strong analytics features.

Microsoft

Microsoft has strengthened its partnership with SAP and focuses on delivering automated migration and operation of SAP workloads on Azure. The provider has significantly enhanced its offerings by integrating GenAI capabilities.

AWS

Leader

"SAP HANA workloads on AWS are a powerful combination that enables enterprises to leverage both platforms' benefits. AWS offers a wide range of secure infrastructure services and excellent performance for hosting SAP workloads, allowing clients to migrate quickly and safely."

Shashank Rajmane

Overview

AWS is headquartered in Washington, U.S. and operates in 32 regions. In FY22 the company generated $80.1 billion in revenue, with compute, storage, and database as its largest segment. It offers various options for customers in the U.S. with SAP HANA, including Bring Your Own License, express edition and trial systems. The company has the largest SAP on the AWS partner ecosystem, providing enterprises across sectors with faster time to value, scalable infrastructure resources and a higher level of availability. AWS has 22 availability zones across six regions in the U.S. to host SAP HANA workloads.

Strengths

Accelerated migration program: Through its AWS ProServe for SAP offering, AWS has helped several U.S.-based enterprises migrate their SAP workloads to AWS faster by providing a value proposition and selecting architecture configurations and options for accelerated migration through best practices from various engagements. AWS also has a rigorous program for its SAP partners that reflects AWS' commitment to delivering top-tier solutions and support.

Advanced automation capabilities: AWS offers various solutions for automated SAP migrations such as AWS Launch Wizard, AWS Migration Hub Orchestrator, AWS Bckint Agent for SAP HANA, AWS Backup Services for SAP HANA, Amazon CloudWatch Application Insights for SAP HANA and

NetWeaver, and AWS Systems Manager for SAP. For instance, AWS' Launch Wizard for SAP enables users to develop architecture patterns to automate SAP S/4HANA deployments and achieve high availability configurations quickly.

Broad portfolio for hosting SAP: AWS offers the highest configurations of virtual machines (VM) and cloud service options for hosting SAP workloads. AWS introduced the AWS SDK for SAP ABAP, simplifying SAP process modernization and allowing seamless integration with over 200 AWS services. Its Amazon EC2 High Memory instances offer on-demand pricing and savings plans for up to a 24 TB Nitro VM, enabling upscaling and downscaling to dynamically adapt to business demand.

Caution

Several clients mentioned that the company needs to provide more control mechanisms over the costs of hosting SAP workloads on AWS. Clients are seeking ways to gain better control on infrastructure costs and want to better manage tagging resources while hosting SAP workloads. AWS should consider adding pre-set dashboards to consume SAP transactional data, enabling the use of analytics.

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Multi Public Cloud Services

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | DECEMBER 2023 | BRAZIL

SAP HANA Infrastructure Services

Who Should Read This Section

This quadrant is relevant to enterprises across industries in Brazil to evaluate providers of SAP HANA infrastructure services for SAP S/4HANA workloads and large-scale HANA databases. ISG highlights the positioning of the providers in the region based on the depth of their offerings and market presence. Through the report, service providers can understand the current market dynamics and competition, while companies can assess innovations from traditional providers or new players.

The hosting of SAP workloads in the public cloud has become common in Brazil due to cost reduction possibilities with the RISE with SAP model and the growing adoption of S/4HANA. Leading cloud providers are offering specific tools for system migration, attracting traditional SAP customers (large enterprises) that have come to rely on their recommendations to migrate their workloads with lowered risks.

The selection of partners for assessing, planning and migrating SAP workloads to the cloud depends on the service provider's experience, certification level and cloud technologies employed. These factors help ensure agility, flexibility and scalability in delivery. Notably, automation resources and tools to improve cloud operations' performance, a flexible architecture and integrated security measures across the infrastructure are key differentiators.

IT leaders should read this report to better understand capabilities of SAP HANA infrastructure service providers and how their approaches to the market can impact enterprise public cloud strategies.

Software development and technology leaders should read this report to understand the relative positioning and workload migration capabilities of SAP HANA infrastructure service providers.

Sourcing, procurement and vendor management professionals should read this report to have a better understanding of the current landscape of SAP HANA infrastructure service providers in Brazil.

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Multi Public Cloud Services
SAP HANA Infrastructure Services

Brazil 2023

H

PORTFOLIO ATTRACTIVENESS

Product Challenger

Contender

● AWS

● Microsoft

● IBM
Google ●

● T-Systems

Huawei ● ● Ativy

Claranet ●

Leader

Market Challenger

L

L   **COMPETITIVE STRENGTH**   H

★ Rising Star
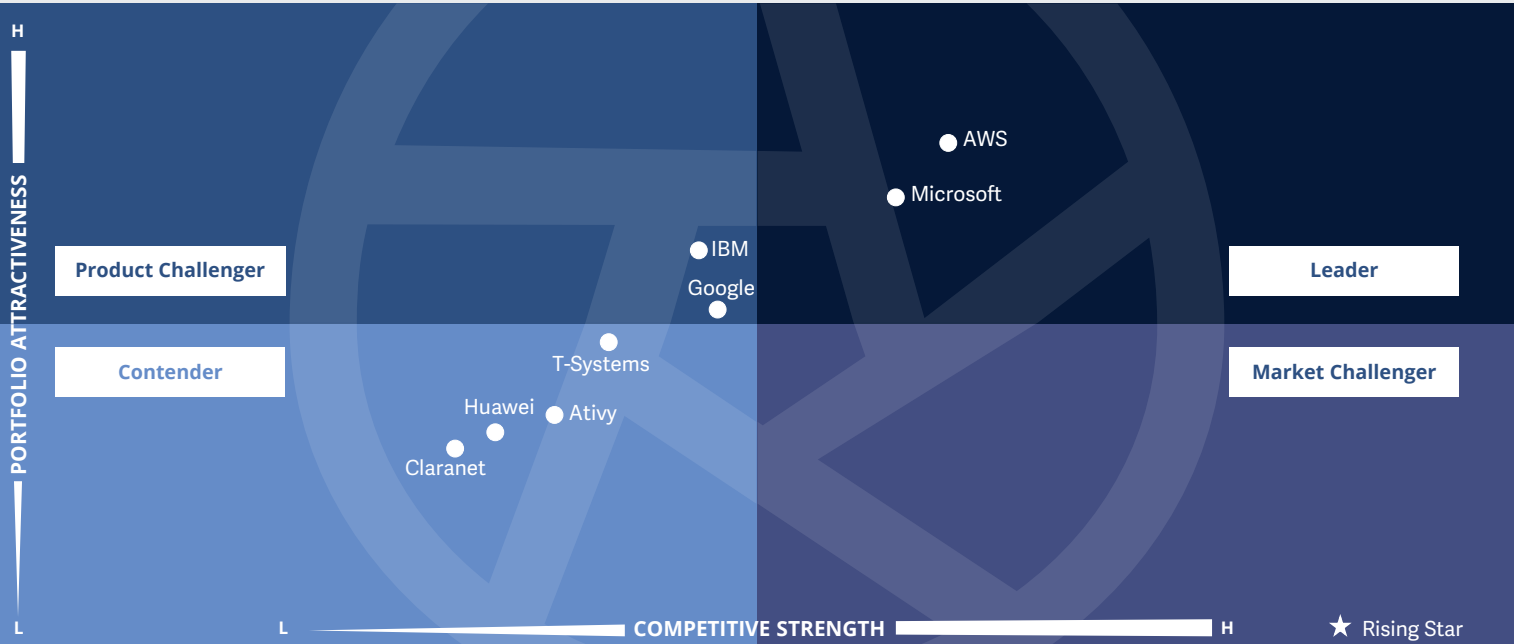
This quadrant assesses the hyperscalers offering **SAP hosting**, with a major focus on SAP HANA instances in **public cloud** for SAP S/4HANA private edition and **RISE with SAP**. Services include security, automation and monitoring tools.

Pedro L. Bicudo Maschio

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions.

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices**, consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications,** with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization.

Observations

The SAP market is of high importance for hyperscalers. Typical SAP clients also migrate other workloads to the cloud. SAP pushes RISE with SAP deals, accelerating cloud migrations. However, typical SAP clients have more than SAP S/4HANA, simultaneously using legacy ERPs, analytic tools, data warehouses, sales and service automation, customer relationship management (CRM), e-commerce, human capital management (HCM) and other SAP or competitors' products.

As observed in 2022, large enterprises typically deal directly with hyperscalers to migrate their SAP workloads to the cloud and use one of their specialized partners to plan and execute these migrations. When choosing their preferred cloud, clients should consider their requirements for integration, network latency, data location and service partners; selecting the right service partners can be as important as choosing the hyperscaler.

The market in Brazil is concentrated on AWS and Microsoft. Google Cloud offers price-competitive deals, but with few cases, including large instances or complex environments.

From the 45 companies assessed for this study, eight qualified for this quadrant, with two being Leaders.

AWS

AWS offers a large number of automation tools for HANA migrations and SAP S/4HANA operations in the cloud. It also has a significant number of virtual machine options, with clients reporting superior performance when hosting SAP S/4HANA on AWS.

Microsoft

Microsoft offers flexible infrastructure configurations to host SAP workloads, with integrated security and collaboration tools. Clients usually integrate the Microsoft Power platform to enrich SAP S/4HANA analytics.

AWS

Leader

> "AWS has many options for SAP on cloud. Besides having more instance types, it offers low latency connectivity to enable high-availability and multiregion business continuity, AI and ML services, analytics, automation, and security and compliance."

Pedro L. Bicudo Maschio

Overview

AWS is headquartered in Washington, U.S. and operates in 32 regions. In FY22, the company generated $80.1 billion in revenue, with Compute, Storage, and Database as its largest segment. It has many SAP clients running ECC, HANA and SAP S/4HANA, with up to 48TB of memory. The company offers automation and professional services (ProServe) to support migrations.

In Brazil, AWS has approximately 450 partners, including 18 with SAP certifications. In 2023, it published the Economic Impact Study, demonstrating how the investment in AWS South America (São Paulo) region impacted Brazil's gross domestic product (GDP).

Strengths

Client experience and reliability: SAP on AWS has a long availability track record, offering over 300 security, compliance and governance services and features. Its low latency interconnectivity enables clients to run SAP in 31 regions and access more than 450 points of presence. AWS offers over 650 generally available EC2 instances under AWS Nitro hypervisor, ensuring superior performance and security.

SAP modernization expertise: AWS' SAP partner competency program ensures clients access to top experts for migrating, running and transforming SAP workloads. In 2022, the company launched AWS SDK for SAP ABAP with more than 200 AWS services to facilitate application modernization and transformation. AWS ProServe practice for

SAP supports clients and partners to achieve the needed results with the best practices and experience gained from many SAP migrations.

Automation at all levels: AWS Launch Wizard and AWS Migration Hub Orchestrator facilitate migrating SAP workloads to AWS. After completion, AWS Backint Agent for SAP HANA provides a SAP-certified backup and restore solution. Amazon CloudWatch Application Insights for SAP HANA and NetWeaver facilitate application operations, and AWS Systems Manager for SAP maintains efficient operations.

Caution

Clients can migrate their SAP ERP to the AWS Cloud with trivial automation. However, ISG studies show that simple migrations can carry obsolete solutions to the cloud, driving cloud resource overutilization. For better results, clients should consider SAP archiving prior to migration and application modernization.

Multi Public
Cloud Services

A research report comparing provider strengths,
challenges and competitive differentiators

SAP HANA Infrastructure Services

Who Should Read This Section

This quadrant is relevant to enterprises across industries in Germany for evaluating providers of SAP HANA infrastructure services for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant, ISG defines the current market positioning of service providers in Germany and shows how they address the key challenges based on the depth of service offerings and market presence.

German SAP customers are increasingly inclined to migrate their SAP infrastructure to cloud environments. Businesses newly exploring SAP/4 HANA are keenly interested in initiating SAP-based operations in the cloud right from the start. Meanwhile, existing SAP customers are at a juncture where they are transitioning from legacy SAP setups to the modern S/4HANA landscape, prompting a critical decision about whether to continue operating the new system within their own data centers. Leading public cloud providers are well-prepared to support this transformation. They offer SAP-certified platforms with robust, scalable infrastructure

and a continuously evolving suite of services and functionalities that adapt to emerging requirements. There is also a growing trend toward providing innovative, industry-specific solutions that deliver added value to customers. These services enhance operational security and compliance, often challenging to maintain within a company's internal data centers.

For customers who prefer to avoid migrating to global public cloud providers, Germany provides the option of partnering with local providers such as CANCOM, T-Systems, Syntax and DATAGROUP. These providers offer comparable services and guarantee data retention within the country's borders.

IT leaders should read this report to better understand the relative strengths and weaknesses of SAP HANA infrastructure service providers and learn how their market approaches can impact enterprise public cloud strategies.

Software development and technology leaders should read this report to understand hyperscale SAP HANA infrastructure providers' relative positioning and capabilities, helping them procure infrastructure and services to migrate their workloads to public cloud platforms.

Sourcing, procurement and vendor management professionals should read this report to develop a better sense of the current landscape of SAP HANA infrastructure service providers in the German market.

ISG Provider Lens™

Multi Public Cloud Services
SAP HANA Infrastructure Services

Source: ISG RESEARCH

Germany 2023

Product Challenger

Contender

Leader

Market Challenger

H

PORTFOLIO ATTRACTIVENESS

L

L   COMPETITIVE STRENGTH   ★ Rising Star

AWS
Microsoft
T-Systems
CANCOM
SAP
DATAGROUP ★
Google
Syntax
plusserver
IBM
q.beyond
Alibaba
INS Systems
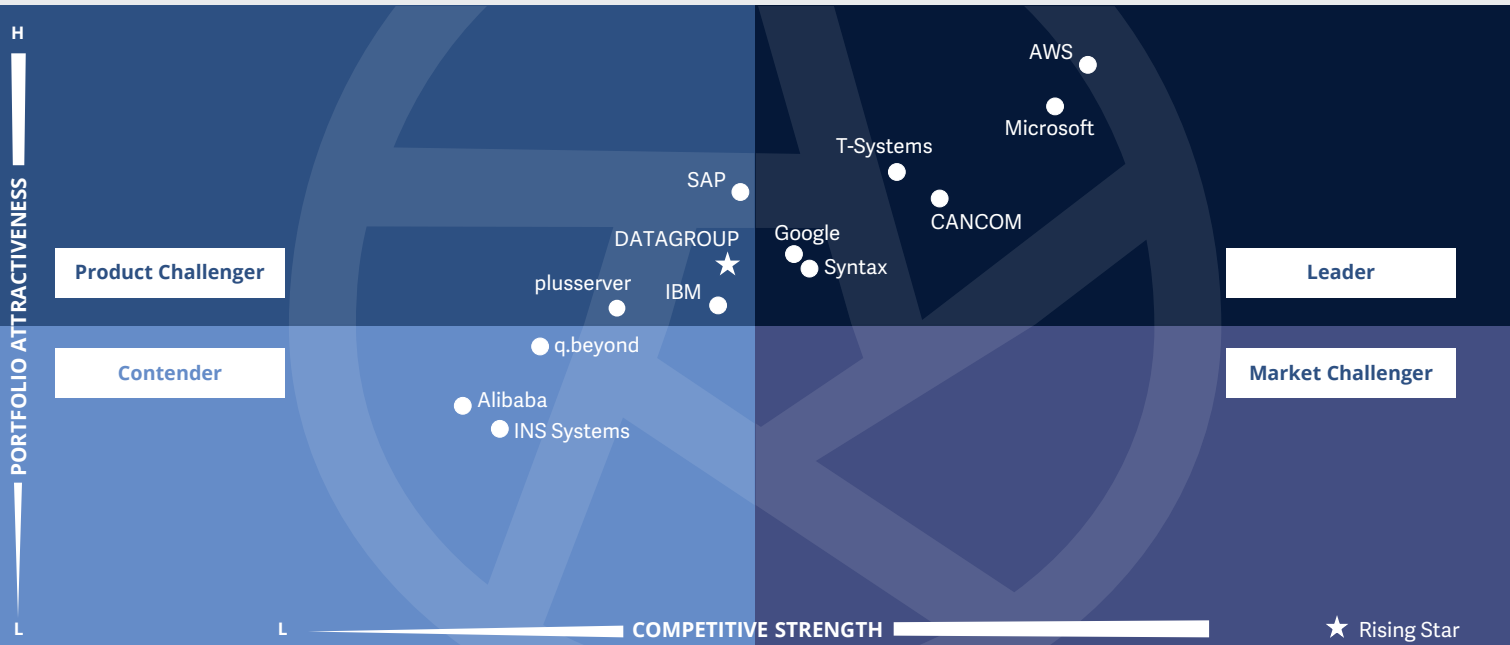
This quadrant evaluates public cloud providers that offer a **flexible infrastructure for** SAP Basis operations in a public cloud environment. The offering includes **secure SAP-certified operations, taking compliance requirements into account.**

Wolfgang Heinhaus

SAP HANA Infrastructure Services

Definition

This quadrant evaluates cloud infrastructures that are best suited for hosting the SAP software portfolio, with a focus on SAP S/4HANA workloads and large HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key evaluation criteria include the IaaS provider's offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource utilization monitoring and dashboard management solutions. The tools required for this can be included in standard IaaS offerings or provided by partners on a marketplace.

Infrastructure providers that participate in the RISE program with SAP receive a higher rating. However, participation in RISE is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, to help customers automate and operate their SAP instances in the cloud.

Cloud infrastructure providers should also offer pre-sales support to assist customers with migration planning, cloud architecture design, sizing and performance optimization, licensing, system and database configuration, virtual private network configuration and third-party solutions (toolset). The support analysis focuses on the provider's service partner ecosystem and the ability to perform appropriate migrations and operations.

Eligibility Criteria

1. IaaS including **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in various memory sizes, enabling **on-demand scaling** to handle instance growth and upgrades with minimal service disruption

2. Storage capacity of more than **6 TB per virtual machine**

3. Easy access, **transparent prices**, consumption-based, reserved-instance and dedicated-instance billing models

4. Recognized **quality standards** and **service certifications** with a focus on **data protection** and cyber security

5. **Cost-effective storage** for backups and archiving

6. Restore functions for **multiple** regions

7. Automated **backup and restore functions** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization

SAP HANA Infrastructure Services

Observations

Companies exploring SAP/4 HANA solutions for the first time are interested in SAP Basis operations on the cloud right from the beginning.

Existing SAP customers in Germany are on the cusp of switching to the modern S/4HANA world from their old SAP environments and must decide whether operating the new system in their own data center is still worthwhile. SAP also urges its customers to choose one of the major public cloud providers for their migration to SAP/4HANA. They can choose from the major public cloud providers, particularly AWS, Microsoft (Azure) and Google (Cloud). SAP only provides specific innovations, such as AI functions or sustainability management, for cloud versions of S/4HANA. The cloud providers have robust, scalable and flexible SAP-certified platforms and work closely with SAP on improvements and enhancements. The services offer secure operations and ensure compliance, which is hardly possible in an

in-house data center. Customers in Germany that are reluctant to switch to an international public cloud provider can switch to one of the local providers that offer comparable services and guarantee that their data remains in the country. These providers include CANCOM, T-Systems, Syntax and DATAGROUP. At the same time, non-critical data can be outsourced to the hyperscalers. The local providers maintain their partnerships with Microsoft, AWS or Google and can develop a hybrid or multicloud strategy.

Atos has not been evaluated because the company does not offer SAP Basis operations.

From the 94 providers assessed for the study, 13 qualified for this quadrant, with six being Leaders and one a Rising Star.

AWS

With around 7,000 customers worldwide, **AWS** is the largest provider, offering an extensive portfolio and new ways to drive innovation.

CANCOM

CANCOM offers a broad SAP/4 HANA Basis operation portfolio and a remarkable market demand overview.

Google

Google has been offering SAP services for around six years and is accelerating the expansion of its service range so as not to lose touch.

Microsoft

Microsoft has maintained a close partnership with SAP for more than 30 years and offers innovative solutions for SAP Basis operations.

▲ SYNTAX

Syntax is one of the first SAP partners with a strong focus on the manufacturing industry and the automotive sector.

T-Systems

T-Systems is one of the leading providers of SAP Basis operations, with a large number of customers and in-depth industry knowledge.

DATAGROUP

DATAGROUP is a successful provider of SAP Basis operations for SMEs and has been named a Rising Star due to its convincing offerings.

AWS

Leader

"AWS is adept at simplifying complex SAP operations with a constant stream of new functions and services and inspiring customers with innovations."

Wolfgang Heinhaus

Overview

Amazon Web Services (AWS), headquartered in Washington, U.S., is one of the world's leading hyperscalers, with 32 geographical regions and 102 highly secure availability zones. In FY22 the company generated $80.1 billion in revenue, with Computers, Storage Systems and Databases as its largest segment. AWS has thousands of employees globally that support companies in their complete transformation and operations. The company has a region in Germany, with three availability zones in Frankfurt am Main. The headquarters in Germany are located in Munich. AWS has many years of SAP experience.

Strengths

AWS SAP Competency Partners program: Through this program, AWS maintains close partnerships with service providers that have significant expertise and knowledge, tools, migration and transformation capabilities for SAP workloads. Only certified partners selected by AWS have the privilege of supporting customers on their journey to the cloud.

AWS SDK for SAP ABAP: In collaboration with SAP, an AWS software development kit (SDK) was developed for the SAP ABAP programming language. It is a simple solution for ABAP developers to connect to over 200 AWS services with just a few lines of code. This accelerates the modernization and transformation of business processes. The AWS SDK for SAP ABAP handles complex security, data formatting and API connectivity requirements. The product supports SAP NetWeaver ABAP from version 7.4.

Comprehensive offering for SAP Basis operations: Around 7,000 customers worldwide appreciate SAP's high availability. More than 300 security, compliance and governance services and functions ensure comprehensive protection in 32 geographical regions. Approximately 650 instances (servers) are available for SAP Basis operations. Leveraging its Nitro Systems, the underlying platform for all instances, AWS offers a high-performance virtual IaaS environment at affordable prices.

Caution

The abundance of SAP cloud services is often confusing for customers. Greater transparency would strengthen trust, ensuring only the needed services are booked.

ISG Provider Lens™

Multi Public Cloud Services

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | DECEMBER 2023 | FRANCE

SAP HANA Infrastructure Services

Who Should Read This Section

This report is relevant to enterprises across industries in France for evaluating providers of SAP HANA infrastructure services for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant, ISG defines the current market positioning of service providers in France and shows how they address the key challenges faced by enterprises in the region.

Enterprises in France are facing challenges in maintaining critical workloads specific to the SAP product line because of factors such as high costs, issues in handling data and change management and a shortage of skilled workers. Many enterprises are implementing SAP HANA as a part of their digital transformation initiatives and are looking for a hyperscale provider to overcome and address the challenges.

Enterprises are leveraging hyperscalers' compute resources, storage and connectivity on public clouds to host SAP workloads and facilitate scaling based on usage and infrastructure operations. Consequently,

there is an increasing reliance on third-party applications that can be seamlessly integrated with SAP S/4 HANA. Service providers have developed specific automation capabilities to assess, plan and migrate SAP to public clouds, including legacy ERP Central Component (ECC) systems and data warehouses.

Enterprises are looking for providers focusing on IaaS performance, cost reduction, agility, improved security and resilience, analytics and industry-specific solutions for migrating SAP workloads. Hence, the integration of cutting-edge technologies like AI/ML into their services is enabling providers to assist clients in the process of modernizing their SAP applications and enhancing their overall business value.

IT leaders should read this report to better understand the relative strengths and weaknesses of SAP HANA infrastructure service providers and how their approaches can impact enterprises' public cloud strategies.

Software development and technology leaders should read this report to understand the relative positioning and capabilities of hyperscale SAP HANA infrastructure providers and how they can help procure infrastructure/services to migrate workloads to public clouds.

Sourcing, procurement and vendor management professionals should read this report to better understand the current landscape of SAP HANA infrastructure service providers in France.

ISG Provider Lens™

Multi Public Cloud Services
SAP HANA Infrastructure Services

France 2023
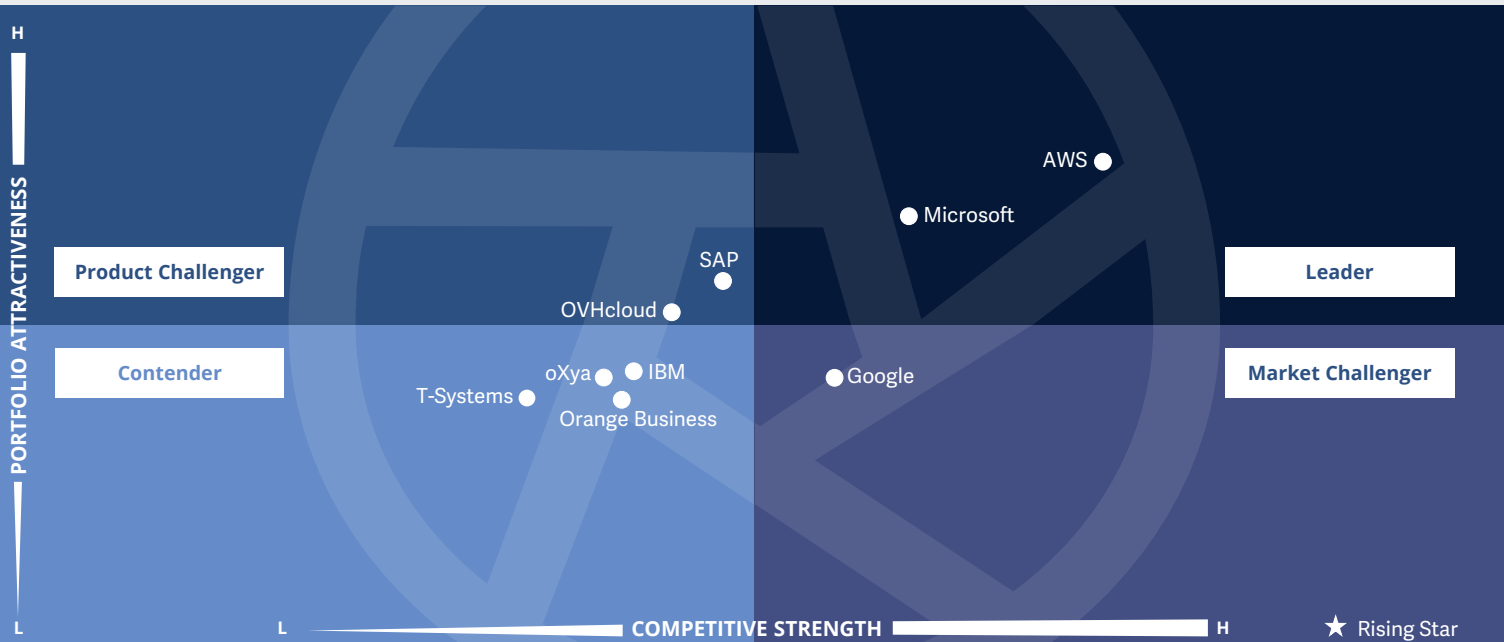
Source: ISG RESEARCH

This quadrant assesses service providers that offer **SAP products hosting**, especially SAP HANA, in public cloud shared environments with standard services and **SAP-certified infrastructure**.

Pedro L. Bicudo Maschio

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products; availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices**, consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications**, with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and t**ools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization

SAP HANA Infrastructure Services

Observations

SAP continues to push clients to migrate legacy ERPs to SAP S/4HANA, with a strong commitment to public clouds. It offers SAP Cloud with a focus on shared SAP solutions. Clients interested in SAP S/4HANA private edition are more inclined to migrate their ERP to AWS, Azure or Google Cloud.

Clients should assess SAP performance when choosing their preferred cloud infrastructure provider. Instances optimized for SAP HANA vary by cloud region. Having more instance options is a benefit for clients that can start with small instances and migrate to larger ones only when necessary. The goal is to pay only for what is in use. The more instances translate to more upscale steps, thus optimizing the spend without losing performance.

All hyperscalers offer upscaling, which usually requires minutes and does not impact SAP availability. However, some offer more and better tools to manage operations, backup and upgrades. Network latency, security tools and automation also differ by hyperscaler.

From the 51 companies assessed for this study, nine have qualified for this quadrant, with two being Leaders.

AWS

AWS offers the most extensive portfolio to migrate and operate SAP solutions. Automation ensures rapid migrations. The large number of cloud regions provides clients with more disaster recovery options. AWS has all possible certifications to ensure SAP compliance.

Microsoft

Microsoft offers many SAP and Microsoft software integration options, providing clients with user-friendly analytics and collaboration. It offers automated tools for SAP migration, monitoring and security integrated with Azure Active Directory (Azure AD).

AWS

"AWS has extensive experience in supporting SAP migrations and optimizing SAP performance. It offers highly secure cloud infrastructure that complies with French regulations around security, certifications and data location."

Pedro L. Bicudo Maschio

Overview

AWS is headquartered in Washington, U.S. and operates in 32 regions. In FY22, the company generated $80.1 billion in revenue, with Compute, Storage, and Database as its largest segment. It surpassed 5,000 SAP clients in 2019, running ECC, HANA and SAP S/4HANA systems with up to 48 TB of memory. With its SAP expertise, AWS offers automation and professional services through ProServe to support migrations. In France, the company has approximately 1,000 employees and approximately 290 partners, including 17 certified in SAP services. In 2022, it announced its plan to invest €5.3 billion in France until 2031.

Strengths

Comprehensive and broadly adopted cloud: AWS has long supported SAP workloads, offering more than 200 pay-per-use services. Clients leverage AWS to lower costs, gain agility, access AI and ML services, and innovate faster. Users can run SAP on 31 regions, including seven in Europe, connected to over 400 edge locations. This flexibility enables clients to host and restore SAP services across regions for superior business resiliency.

Highly scalable infrastructure: AWS EC2 offers more than 650 generally available instances. AWS Nitro System is the hypervisor for high-memory SAP instances, providing close to zero CPU overhead, comparable to bare-metal server performance. AWS' SAP on Graviton3 instances are up to 60 percent more energy efficient and contribute to lower carbon emissions. Clients can start on small instances and grow at their pace without spending on unused capacity.

SAP application overhaul: AWS offers robust automation for migrations and operations with various solutions. These are AWS Launch Wizard, AWS Migration Hub Orchestrator, AWS Backint Agent for SAP HANA, AWS Backup Services for SAP HANA, Amazon CloudWatch Application Insights for SAP HANA and NetWeaver, and AWS Systems Manager for SAP. AWS ProServe helps clients with best practices, and AWS' SAP partner competency program ensures clients' access to the best experts.

Caution

AWS migration tools work for SAP S/4HANA private edition or RISE with SAP (SAP-managed operations). However, clients may require SAP partner well-versed in AWS solutions to get better results, such as SAP archiving prior to migration and ABAP modernization to integrate with AWS services.

iSG Provider Lens™

Multi Public Cloud Services

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | DECEMBER 2023 | NORDICS

SAP HANA Infrastructure Services

Who Should Read This Section

This report is relevant to enterprises across industries in the Nordics for evaluating providers of SAP HANA infrastructure services for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant report, ISG highlights the current market positioning of service providers in the region and shows how they address the key challenges of enterprises based on the depth of their service offerings and market presence.

Enterprises operating in the Nordics are currently facing challenges related to maintaining critical SAP workloads that include financial burdens, intricate data management, change management and the scarcity of skilled personnel. A considerable number of enterprises have introduced SAP HANA into their digital transformation initiatives and are actively seeking hyperscale providers to assist them in overcoming these hurdles.

Enterprises are focusing on achieving cost reductions, enhancing agility, fortifying security and resilience, harnessing the potential of data analytics and implementing solutions tailored to specific industries for the migration of SAP workloads. Furthermore, there has been a noticeable increase in the integration of third-party applications with SAP S/4 HANA.

To address these challenges effectively and facilitate scalability according to use and operational needs, service providers need to help enterprises capitalize on computational resources, storage options and connectivity for hosting their SAP workloads. Enterprises are progressively incorporating SAP HANA into their business processes, with a particular focus on meeting IT infrastructure requirements and on integration with third-party tools.

IT leaders should read this report to better understand SAP HANA infrastructure service providers' relative strengths and weaknesses and the impact of providers' market approaches on public cloud strategies.

Software development and technology leaders should read this report to understand SAP HANA infrastructure providers' capabilities for migrating workloads to the public cloud.

Sourcing, procurement and vendor management professionals should read this report to develop a better understanding of the current landscape of SAP HANA infrastructure service providers in the Nordics.

ISG Provider Lens™

Source: ISG RESEARCH

Multi Public Cloud Services
SAP HANA Infrastructure Services

Nordics 2023

H

PORTFOLIO ATTRACTIVENESS

AWS

Microsoft

SAP

Product Challenger

Google

IBM

Leader

Contender

T-Systems

OVHcloud

Market Challenger

Orange Business

L

L

COMPETITIVE STRENGTH

H

★ Rising Star

This quadrant assesses service providers that **offer SAP products hosting, especially SAP HANA,** in public cloud shared environments with standard services and **SAP-certified infrastructure**.

Rohan Thomas

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions.

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices,** consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications,** with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization.

Observations

While numerous Nordic companies are embracing SAP S/4HANA services for enhanced agility, SAP is actively promoting its integration into public cloud services through initiatives like Embrace and RISE with SAP. Despite the availability of mature SAP S/4HANA offerings by major hyperscalers in the region, some customers remain hesitant to make the transition to cloud-based solutions. Overall, the SAP HANA infrastructure services market has exhibited consistent growth in recent years and is likely to continue on this trajectory in the future.

Hyperscalers are significantly investing in new data centers across the Nordics, focusing on infrastructure optimized for SAP HANA workloads in response to the growing demand for such services in the region. In addition to data center expansion, they are diversifying their SAP/HANA infrastructure service offerings, including managed SAP HANA and disaster recovery services. Partnerships with SAP and its partners bolster these efforts to

support businesses in adopting SAP HANA workloads effectively and maximizing their investments.

Orange Business is a new entrant in this quadrant, offering a comprehensive suite of consulting services, ranging from testing, deployment and PoC development to SAP solution optimization.

From the 49 companies assessed for this study, eight have qualified for this quadrant, with three being Leaders.

AWS

AWS is renowned for its global cloud infrastructure, comprehensive SAP hosting services and expert SAP solutions through AWS ProServe. Its collaboration and track record result in cost-effective solutions and high customer satisfaction.

Google

Google Cloud's SAP HANA services provide seamless migration support for transitioning SAP workloads to the cloud while fostering collaborative partnerships with customers. It offers robust security features, including data encryption and compliance certifications.

Microsoft

Microsoft Azure provides robust SAP HANA infrastructure support, accommodating a wide range of SAP applications, from OLTP to OLAP workloads. Its collaboration with SAP accelerates the adoption of SAP S/4HANA and SAP Cloud Platform on Azure.

AWS

Leader

"AWS offers purpose-designed infrastructure and a suite of tools and services that streamline its SAP applications' migration, operation and modernization."

Rohan Thomas

Overview

AWS is headquartered in Washington, U.S. and operates in 32 regions. In FY22, the company generated $80.1 billion in revenue, with Compute, Storage, and Database as its largest segment. In the region, it has three availability zones to host SAP HANA and other SAP ERP versions in Stockholm and an Oslo-based local zone in the pipeline. AWS offers tailored infrastructure, tools and services for seamless SAP migration, operation and modernization. With a secure and extensive cloud infrastructure and more than 200 AWS services, it empowers SAP customers to optimize their investments, enabling business transformation.

Strengths

Leading cloud infrastructure: AWS offers the world's most comprehensive and widely adopted cloud platform, featuring over 200 fully featured services across global data centers. AWS' extensive global cloud infrastructure with 31 regions, 99 availability zones, over 450 POPs and more than 400 edge locations, makes it preferable to most enterprises and government agencies.

Notable AWS ProServe expertise: AWS ProServe possesses extensive expertise in SAP on AWS, collaborating closely with service teams to champion the customer's perspective. This practice benefits from substantial project experience to provide 14 packaged solutions, resulting in an exceptional 9.9 CSAT score in 2022 and significant cost reductions through

automation. An integral aspect of this capability is its engagement with the AWS SAP partner network, promoting the exchange of best practices and packaged offerings.

Prolific SAP Hosting on AWS: AWS possesses extensive SAP expertise and offers leading services, focusing on customer input and engineering efforts. AWS introduced the AWS SDK for SAP ABAP, simplifying SAP process modernization and allowing seamless integration with over 200 AWS services. This empowers customers to leverage SAP inside their AWS environments to further innovate.

Caution

AWS regions in the Nordics may offer fewer availability zones than regions such as the U.S., potentially restricting options for critical high-availability setups. While additional availability zones are accessible from other regions, clear communication with the Nordic customers is essential.

Multi Public
Cloud Services

A research report comparing provider strengths,
challenges and competitive differentiators

QUADRANT REPORT | **DECEMBER 2023** | **SWITZERLAND**

SAP HANA Infrastructure Services

Who Should Read This Section

This report is relevant to enterprises across industries in Switzerland that are evaluating SAP HANA infrastructure service providers for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant report, ISG defines the current market positioning of service providers in Switzerland and shows how they address key challenges based on the depth of service offerings and market presence.

Swiss customers using SAP are increasingly inclined to shift their SAP infrastructure to cloud environments. Businesses newly exploring SAP/4 HANA are particularly interested in commencing their SAP operations in the cloud from the outset. Meanwhile, existing SAP customers face a pivotal moment as they transition from legacy SAP setups to the modern S/4HANA landscape, prompting a crucial decision on whether to continue operating the new system within their own data centers.

Leading public cloud providers are well-prepared to support this transformation. They offer SAP-certified platforms that feature robust, scalable infrastructure and a continuously evolving array of services and functionalities that adapt to emerging needs. Moreover, there is a growing trend toward offering innovative, industry-specific solutions that provide additional value to customers. These services enhance operational security and compliance, aspects that can often be challenging to maintain within a company's internal data centers.

For customers who prefer not to migrate to international public cloud providers, Switzerland offers the option of collaborating with local providers. These providers offer similar services and ensure data remains within the country's borders.

IT leaders should read this report to understand the relative strengths and weaknesses of SAP HANA infrastructure service providers and how their market approaches can impact enterprise public cloud strategies.

Software development and technology leaders should read this report to understand SAP HANA infrastructure providers' capabilities for migrating workloads to the public cloud.
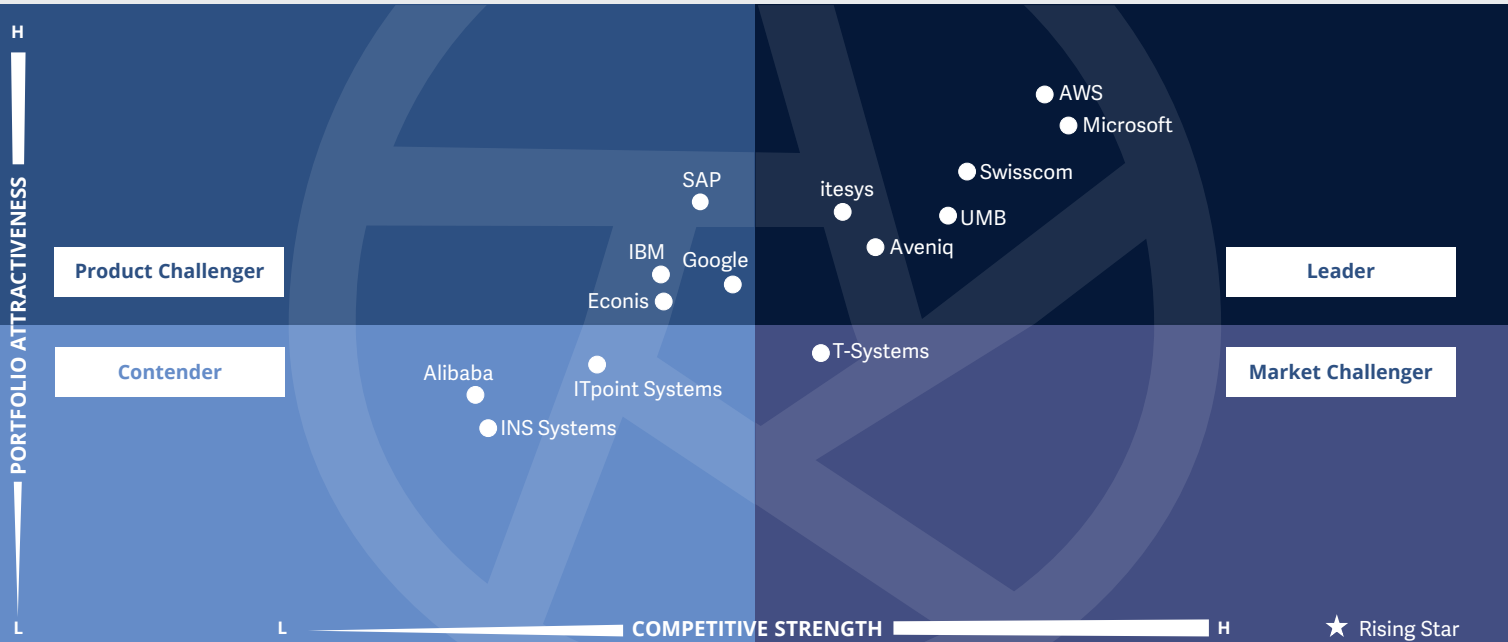
Sourcing, procurement and vendor management professionals should read this report to develop a better sense of the current landscape of SAP HANA infrastructure service providers in Switzerland.

ISG Provider Lens™

Source: ISG RESEARCH

Multi Public Cloud Services
SAP HANA Infrastructure Services

Switzerland 2023

PORTFOLIO ATTRACTIVENESS

H

L

Product Challenger

Contender

Leader

Market Challenger

AWS
Microsoft
Swisscom
itesys
UMB
Aveniq
SAP
IBM
Google
Econis
T-Systems
Alibaba
ITpoint Systems
INS Systems

L — **COMPETITIVE STRENGTH** — H

★ Rising Star

This quadrant evaluates experienced providers in Switzerland offering SAP-based operations in **secure data centers** on an SAP-certified platform.

Wolfgang Heinhaus

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions.

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices**, consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications**, with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization.

Observations

Many medium-sized customers in Switzerland are still reluctant to transform their SAP systems to the public cloud, citing internal policies or regulatory requirements. But the faction is crumbling. Companies are preparing to migrate their old SAP environments to the modern S/4HANA world, facing the choice of hosting the new solution in their own data centers or opting for a cloud-based setup. SAP is urging its customers to choose one of the public cloud providers for their migration. They can choose from the major hyperscalers, notably AWS, Microsoft and Google. SAP now only provides certain innovations, such as AI functions or sustainability management, for cloud versions of S/4HANA. Cloud providers offer powerful, scalable and flexible SAP-certified platforms where customers pay only for services used.

Customers in Switzerland, reluctant to migrate to one of the large public cloud providers, have the option of switching to one of the many local providers offering comparable services and guarantee data residency within the country. These include Aveniq, itesys, Swisscom, UMB and others. At the same time, non-critical data can be outsourced to hyperscalers. Collaborating with Microsoft, AWS or Google, these local providers can develop hybrid or multicloud strategies.

From the 63 providers assessed for this study, 14 qualified for this quadrant, with six being Leaders.

AVENIQ

Aveniq offers a comprehensive SAP/4HANA migration service, highly valued by customers eager to leverage its benefits.

AWS

AWS remains the world's largest provider of SAP Basis operating services in the public cloud, offering the largest and most attractive range of services. Customers worldwide, including Switzerland, appreciate the comprehensive offering.

itesys

itesys continues to successfully offer SAP/4HANA basic operating services, inspiring customers with its flexible offerings.

Microsoft

Microsoft has been the leading SAP SaaS/Paas/SaaS public cloud provider, serving all size classes and industries. The industry-specific offering is unparalleled.

Swisscom

Swisscom is constantly adapting its IaaS portfolio to changing market requirements, increasingly incorporating industry-specific solutions into end-to-end offering.

UMB

UMB has developed its portfolio enormously, moving away from pure technology services toward a holistic concept including industry-specific topics.

AWS

"AWS has established a strong foothold in the Swiss market, providing a region with three availability zones in the Zurich area and planning further investments."

Wolfgang Heinhaus

Overview

AWS, headquartered in Washington, U.S., is one of the world's leading hyperscalers with 32 geographical regions and 102 highly secure availability zones. With thousands of employees, in FY22, the company generated revenue of $80.1 billion, primarily from computers, storage systems and database provision, with millions of active customers every month. AWS, based in Zurich, has established the AWS Europe region in Switzerland with three highly secure availability zones, with ongoing investments planned. AWS has been a successful SAP partner worldwide since 2008.

Strengths

New cloud region in Switzerland: Many service providers and companies have been waiting for the AWS Europe cloud region, which is now available. Customers appreciate its high availability, low latency and secure data residency options in Switzerland. At the launch, there are 112 innovative services available to customers.

Comprehensive offering for SAP Basis operations: AWS has around 7,000 SAP customers worldwide, providing high availability and over 300 security, compliance and governance services for extensive coverage. A large number of instances (servers) are available in Switzerland, leveraging Nitro Systems, the underlying platform for all instances, to offer a high-performance virtual IaaS environment at affordable prices.

AWS SDK for SAP ABAP: In collaboration with SAP, AWS developed an AWS software development kit (SDK) for the SAP ABAP programming language. It is a simple solution for ABAP developers to connect to over 200 AWS services with just a few lines of code. This SDK accelerates modernization and business processes transformation, handling complex security, data formatting and API connectivity requirements. The product supports SAP NetWeaver ABAP from version 7.4 onward.

Caution

AWS has a wide range of migration tools. However, collaboration with local partners possessing extensive SAP expertise is essential for AWS. The company should expand its partnerships in the Swiss market as quickly as possible to bolster its presence.

Multi Public Cloud Services

A research report comparing provider strengths, challenges and competitive differentiators

SAP HANA Infrastructure Services

Who Should Read This Section

This report is relevant to enterprises across industries in the UK for evaluating SAP HANA infrastructure service providers for SAP S/4HANA workloads and large-scale HANA databases. In this quadrant, ISG defines the current market positioning of these service providers in the UK and demonstrates how they address key challenges based on the depth of service offerings and market presence.

Enterprises in the UK are currently dealing with various challenges when maintaining critical SAP workloads. These challenges include financial burden, data management and change control complexities, and skilled personnel shortage. In response, many of these enterprises are incorporating SAP HANA into their digital transformation initiatives and are actively seeking hyperscale providers to help them overcome these obstacles.

Enterprises are increasingly focusing on achieving cost reductions, enhancing agility, bolstering security and resilience, harnessing data analytics and implementing industry-specific solutions for migrating SAP workloads. An increase in the integration of third-party applications with SAP S/4 HANA is also evident.

Enterprises are further capitalising on compute resources, storage options and connectivity offered by hyperscale public cloud platforms to host SAP workloads and address the abovementioned challenges. They are increasingly incorporating SAP HANA into their business processes, specifically addressing IT infrastructure needs, ensuring scalability and adaptability of HANA-based workloads and seamless integration with third-party tools.

IT leaders should read this report to better understand SAP HANA infrastructure service providers' relative strengths and weaknesses and impact of providers' market approaches on public cloud strategies.

Software development and technology leaders should read this report to understand SAP HANA infrastructure providers' capabilities for migrating workloads to the public cloud.
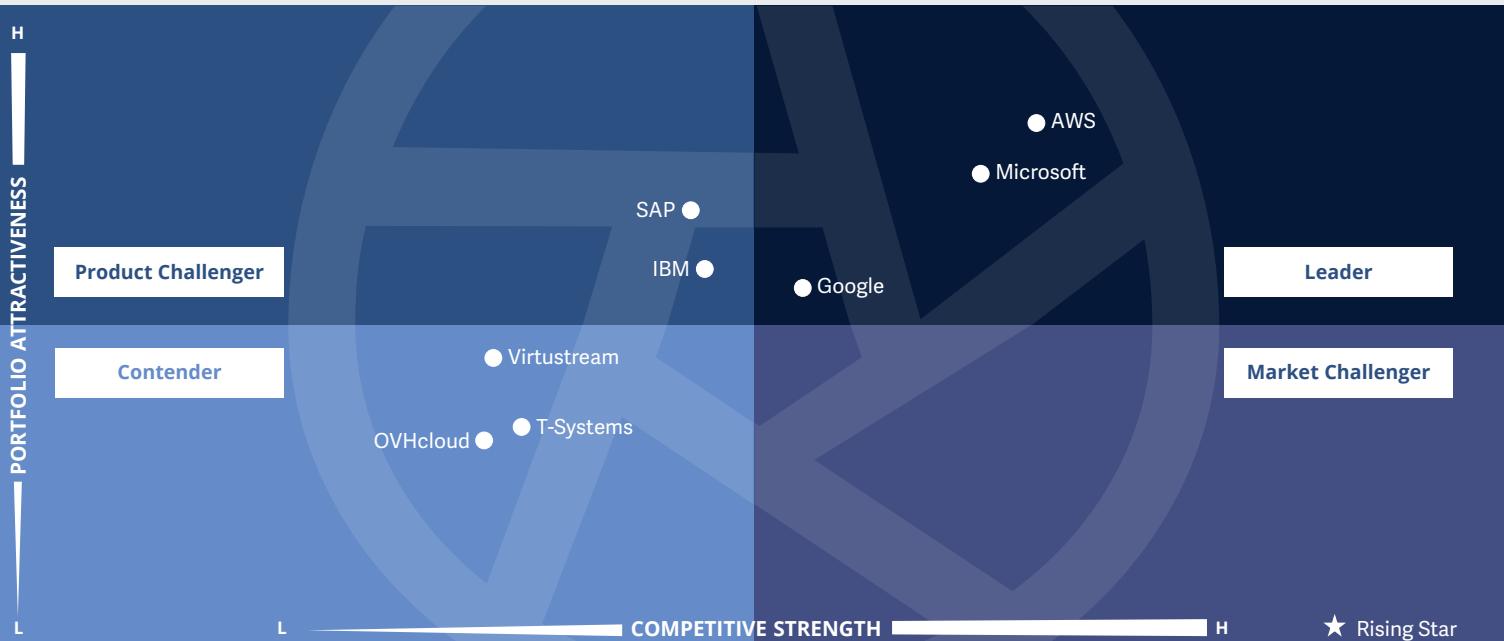
Sourcing, procurement and vendor management professionals should read this report to better understand the current landscape of SAP HANA infrastructure service providers in the UK.

ISG Provider Lens™

Multi Public Cloud Services
SAP HANA Infrastructure Services

U.K. 2023

PORTFOLIO ATTRACTIVENESS

H

● AWS

● Microsoft

SAP ●

IBM ●

● Google

Product Challenger

Leader

Contender

Market Challenger

● Virtustream

● T-Systems

OVHcloud ●

L

L **COMPETITIVE STRENGTH** H

★ Rising Star

This quadrant assesses service providers that **offer SAP products hosting**, especially SAP HANA, in public cloud shared environments with standard services and **SAP-certified infrastructure**.

Rohan Thomas

SAP HANA Infrastructure Services

Definition

This quadrant assesses cloud infrastructures best suited to host SAP's software portfolio, emphasizing SAP S/4HANA workloads and large-scale HANA databases. Participating providers offer IaaS, including infrastructure operations, facilities, provisioning and scaling capacity for SAP workloads.

Key criteria for assessment include the IaaS providers' offering of data migration tools, technical support, system imaging, backup and restore capabilities, disaster recovery solutions, resource usage monitoring and dashboard management solutions. These tools required can be a part of the standard IaaS offerings or provided by partners in a marketplace.

Infrastructure providers that participate in the RISE with SAP program receive a higher rating. However, RISE participation is not a mandatory requirement for inclusion in this quadrant. Ideally, the infrastructure provider should have a broad ecosystem, including SAP partners, enabling them to support clients in automating and operating their SAP instances in the cloud.

The cloud infrastructure provider should also offer pre-sales support to help clients with migration planning, cloud architecture design, sizing and performance optimization, licensing considerations, system and database configuration, virtual private network configuration and third-party vendor solutions (toolsets). The support analysis focuses on the vendor's service partner ecosystem and their expertise in conducting related migrations and operations.

Eligibility Criteria

1. IaaS to include **SAP-certified servers** with storage and connectivity for SAP products. Availability of SAP HANA instances in multiple memory sizes, enabling **on-demand upscaling** to accommodate instance growth and upgrades with minimum service interruptions.

2. Memory capacity exceeding **6 TBs per virtual machine**

3. Easy access, **transparent prices,** consumption-based, reserved instance and dedicated instance billing models

4. Recognized **quality standards** and **service certifications,** with a strong focus on **data protection** and cybersecurity

5. **Low-cost storage** for backups and archiving

6. **Multi-region** disaster recovery capabilities

7. Automated **backup and restore functionality** (platform-based, proprietary or partner solutions)

8. Frameworks and **tools for application** and **data migration**

9. An ecosystem of **certified partners** with SAP specialization.

Observations

AWS continues to be a Leader in the SAP HANA Infrastructure Services quadrant owing to its product portfolio and competitive strength. The company maintains an extensive partner ecosystem and ensures that its partners are certified with SAP transformation capabilities.

Microsoft follows AWS in terms of portfolio attractiveness and competitive strength. The company has established a strategic partnership with SAP, enabling accelerated adoption of SAP S/4HANA services. AWS and Microsoft collaboratively hold a substantial share in the UK's infrastructure as a service (IaaS) market. This shared influence greatly contributes to the competitive strengths of both companies in this market.

While positioned as a Leader in this quadrant, Google may not have the same level of visibility as AWS and Microsoft. Nevertheless, the company is recognised for its stringent encryption and AI capabilities, which enhance the security of the SAP HANA environment and facilitate seamless integration with other datasets.

Virtustream, positioned as a Contender in this quadrant, used to be an independent cloud company providing SAP HANA infrastructure services. However, following its merger with Dell EMC in 2015, the company's presence in this market has sunsetted.

From the 53 companies assessed for this study, eight qualified for this quadrant, with three being Leaders and no Rising Star.

AWS

AWS provides a secure and reliable cloud infrastructure, maximising its customers' SAP investments. Its extensive partner network ensures that partners possess the expertise needed for SAP workload migration, operation and transformation.

Google

Google Cloud Platform (GCP) SAP HANA services encompass containerisation capabilities, APIs and scalable data processing for SAP workloads. It provides enhanced security measures that protect the SAP workload from unauthorized access.

Microsoft

Microsoft customers operating SAP workloads on Azure can integrate with its extensive range of software tools, including Microsoft 365, Teams, Power Apps and Power BI. It provides SAP-certified virtual machines with memory capabilities ranging from 192 GB to 12 TB.

AWS

> "AWS has transformed its SAP HANA infrastructure services with diverse instances and bare metal options, attracting significant clients across multiple regional industries."
>
> *Rohan Thomas*

Overview

AWS is headquartered in Washington, U.S. and operates in 32 regions. In FY22 the company generated $80.1 billion in revenue, with Compute, Storage and Database as its largest segment. In the UK, it has one region in London comprising three availability zones to host SAP HANA and other SAP ERP versions. AWS offers tailored infrastructure and services for seamless SAP application migration and modernisation. AWS maximises SAP investments with a secure, reliable cloud infrastructure and a range of services, including IoT, AI, ML and smart manufacturing.

Strengths

Innovative AI and ML solutions: AWS is a leader in AI and ML, offering custom silicon chips for training (Trainium), inferencing (Inferentia) and powering large language models (LLMs) in production. CodeWhisperer boosts developer productivity, and Amazon Bedrock provides access to various LLMs while maintaining robust security. SAP users seamlessly access AWS AI and ML via the AWS SDK for SAP ABAP.

Adaptable and comprehensive cloud offering: With over 200 fully featured services available globally, AWS serves millions of customers, including startups, enterprises and government agencies. It provides higher reliability than other major cloud providers, offering a deep set of security tools and a global infrastructure covering 31 regions and 99 availability zones. AWS also boasts a diverse portfolio of performant instances that combines the flexibility of virtual machines with bare-metal-like performance and enhanced security. It collaborates with SAP on energy-efficient solutions like Graviton3.

SAP Competency Partners program: With unparalleled years of experience, AWS has created the most rigorous program for its SAP partner network, ensuring partners possess the expertise needed for SAP workload migration, operation and transformation. This program reflects AWS' commitment to delivering top-tier solutions and support for SAP in the cloud.

Caution

AWS services come with an intricate and challenging-to-navigate pricing model. Prospective clients may encounter difficulties when exploring the pricing options for migrating and running SAP HANA. Analysing the cost implications across scenarios can be complex, potentially posing challenges in the procurement process.

Appendix

Report Author: Shashank Rajmane

Multicloud strategy and FinOps are foundational elements for migrating to public cloud environments

The widespread adoption of cloud technology in the U.S. is fueling innovation and improving CX. It has pushed enterprises to make significant investments in migrating to public cloud infrastructure. In the last four quarters, ISG has observed a steady demand for cloud computing in the region, mainly due to the increasing digitalization of business operations and the growing need for high-performance computing solutions for business-critical workloads. This demand is primarily driven by the rapid expansion and evolution of various technological segments, with application modernization and AI and ML technologies leading the charge. Enterprises in the U.S. are also looking to reengineer their legacy software applications to align them with current business needs and next-generation cloud infrastructure. This process often necessitates substantial expertise in transformation capabilities and computational power due to the complexity of these applications. The AI and ML technologies, which form the backbone of many modern digital services and solutions, are known for their intensive consumption of compute resources. The resource-intensive nature of these technologies is a testament to their complexity and sophistication as they involve complex algorithms and processes requiring substantial computational power to function effectively. ML models, for instance, often need to process vast amounts of data in real-time, which requires robust and efficient computing resources. The high demand for these compute resource-intensive technologies underscores the critical role of cloud computing in today's digital landscape. By providing scalable and efficient computing resources on demand, multicloud computing platforms enable businesses and developers to leverage advanced technologies without substantial upfront investment in IT infrastructure.

Multicloud is becoming the norm and complements business needs to achieve optimum results.

ISG's choice of Multi Public Cloud Services for the name of this study results from the prominence of multicloud environments in the IT industry. It also corroborates our research, where it was observed that around one-third of all enterprises use at least one public cloud, with the remaining using two public clouds and three cloud providers, respectively, and a small percentage using four or more public clouds. This multicloud environment has created an additional layer of complexity in managing the cloud infrastructure, leading the enterprise community to opt for an external service provider instead of managing complex environments by themselves. However, the skill shortages have made procuring the right resources for these requirements challenging. An individual with exposure and qualifications across multiple clouds is considered more valuable as they can enable effective hybrid cloud implementations and operations across most organizations. Multiple certifications also help ensure alignment and requirement fulfillment for future engagements with multiple clouds. Therefore, organizations are encouraged

to leverage service providers to get the necessary skills and technologies to grow their business and get the most value from the latest advanced technologies to drive innovation and competitive advantage.

Based on ISG's estimates, we have observed that the overall cloud services market has grown by approximately 50 percent in the U.S. since last year. However, when we looked at the global geography, the growth was more than 100 percent during the period. This shows that although the U.S. is one of the major markets in the world, its growth rate is half when compared to the global cloud services growth rate. In the ISG Index™ call for the Americas market, we reported that the combined market (managed services and XaaS) witnessed a seven percent decline in the first nine months of 2023, with the annual contract value (ACV) reaching $35.4 billion. ISG observed slowing demand for XaaS, with year-to-date spending declining at 16 percent. However, managed services gained traction and grew by six percent, with ACV reaching $15.7 billion. ISG also observed that a total of 1,090 managed services contracts

were signed in the first nine months of 2023. Within Managed Services, the ITO market grew by 21 percent to $11.6 billion, while the BPO market slid by 20.5 percent to reach an ACV of $4.2 billion.

Recently, ISG rolled out the Star of Excellence™ program, which is based on the voice of the customer concept. Here, providers are rated on six parameters, namely Service Delivery, Governance and Compliance, Collaboration and Transparency, Innovation and Thought Leadership, People and Culture Fit, and Business Continuity. The scores and data come from the Star of Excellence™ study that measures CX with providers based on direct client feedback. ISG found that the average provider CX score for the public cloud domain in North America was 79.9 in 2022. Cognizant, Computacenter, DXC Technology, HCLTech, HPE and Infosys are the top six providers with above-average CX scores. Infosys won the overall global public cloud Star of Excellence™ award for 2022.

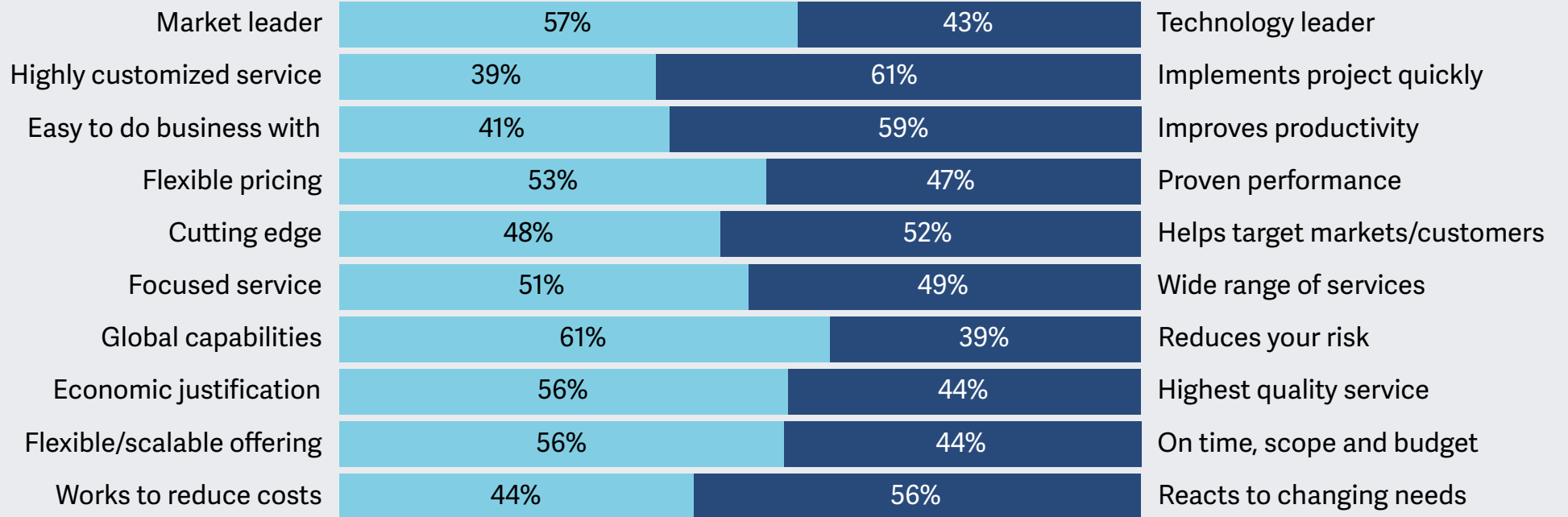ISG also conducted an individual research study on Cloud Buyer behavior in 2022.

The findings helped several enterprises make better purchasing decisions around choosing cloud providers and managed services partners. Below is a snapshot of what traits enterprises look for in an MSP to support cloud adoption.

Per the findings, preferred MSP traits varied greatly between organizations that have rapidly adopted the cloud versus those that are more conservative. Organizations that are slowest in migration are more likely to prefer flexibility, scalability and market leaders that can demonstrate financial justification, compared to mature organizations and cloud pioneers who focus on performance, technology expertise and quality.

Some of the trends observed over the last year are as follows:

- **Cloud-native focused approach:** For many enterprises in the U.S., migrating their workloads to public cloud environments by leveraging cloud-native technologies has become a priority. While lift-and-shift can be a quick way to move applications to the cloud, it does not fully leverage the capabilities of cloud-native technologies

Cloud Market Insights

Market leader	57% / 43%	Technology leader
Highly customized service	39% / 61%	Implements project quickly
Easy to do business with	41% / 59%	Improves productivity
Flexible pricing	53% / 47%	Proven performance
Cutting edge	48% / 52%	Helps target markets/customers
Focused service	51% / 49%	Wide range of services
Global capabilities	61% / 39%	Reduces your risk
Economic justification	56% / 44%	Highest quality service
Flexible/scalable offering	56% / 44%	On time, scope and budget
Works to reduce costs	44% / 56%	Reacts to changing needs

Source: 2022 ISG Cloud Survey Research

and can lead to inefficiencies and limitations in the long run. Cloud-native technologies are designed to take full advantage of the cloud environment, and this involves breaking down monolithic applications into smaller, independent microservices that can be developed, deployed and scaled independently. Packaging these microservices into containers provides a consistent and isolated runtime environment across different cloud platforms. The process includes containerization, microservices, serverless computing and orchestration tools like Kubernetes that enable highly scalable, resilient and agile applications, which are key attributes in today's fast-paced digital economy. Service providers are expanding their cloud-native practices to support this transformation. They are helping U.S.-based organizations develop strategies for adopting containerization and microservices, guiding best practices and offering tools and services to facilitate the transition. By doing so, the providers are playing a crucial role in helping enterprises unlock the full potential of the cloud.

- **Mature AIOps offerings:** With the increase in enterprise demand for automated migration and operations, there is a rise in the improvement of intelligent automation capabilities by leveraging AI and ML technologies. As these technologies mature, AIOps solutions will become more powerful and sophisticated. The solutions will be able to identify real problems and provide meaningful insights from large volumes of structured and unstructured data, false positives and false negatives. MSPs are increasing the use of AIOps capabilities and are offering a 30 to 50 percent reduction in their operational activities, depending on their toolset and AI maturity. These AIOps solutions analyze large volumes of data, identify meaningful patterns and provide insights that support proactive responses. Over the years, AIOps solutions have matured to become prescriptive and self-heal some issues in an automated manner.

- **FinOps has become table stakes:** Enterprises have been experiencing a surge in cloud consumption, making managing and optimizing cloud expenses a top priority

for many businesses. FinOps has helped several clients eliminate cloud waste and bring financial accountability to the variable spend model of the cloud, enabling teams to make business trade-offs between speed, cost and quality. As a result of these benefits, FinOps has grown increasingly popular. This growth is driven by the increasing need for businesses to gain better visibility into their cloud costs and usage and align their cloud investments with business outcomes. ISG has observed that no single FinOps tool offers all functionalities; therefore, clients can choose service providers that integrate FinOps tools to provide comprehensive cost management dashboards.

The **Consulting and Transformation Services for Large Accounts** quadrant for the U.S. geography continued the growth momentum in the last four quarters. Some key reasons include enterprises understanding the true business value of moving to the public cloud, which has led to increased adoption of cloud technology. It has also made the enterprise community realize that leveraging multiple cloud technologies will enable them to use

the best technologies, leading to improved CX and increased revenues. However, enterprises have been cautious about what workloads to move to the public cloud, pausing some future migration projects and focusing on optimizing the workloads on existing cloud environments. There is an increased focus on integrating AI and ML technologies to automate processes, resulting in cost savings and process improvements. Large global U.S.-based enterprises are looking at service providers with industry-specific solutions, cloud-native transformation capabilities, automation-focused migrations and expertise in hybrid cloud integrations. In that vein, service providers in the U.S. are focusing on a business-value-driven strategy to aid enterprises in efficiently assessing workload migration to ideal landing zones, including multiple public cloud infrastructures (which could be a part of a hybrid cloud strategy). The providers are also growing their cloud-native practice and helping clients with their container and microservices strategy. As enterprise customers realize that the lift-and-shift method of migrating to the cloud will not benefit them in the long term,

workloads must be rearchitected by leveraging cloud-native technologies.

In offering **Consulting and Transformation Services for Midmarket** on public cloud infrastructure, providers continue to focus on targeting their sweet spot, SMEs, as the large global service providers fail to give attention to these enterprise segments. The midmarket providers have been nimble and accommodating to go above and beyond to satisfy clients' requirements. This attribute has enabled the providers to bring out innovative solutions, with automation being a key element in the engagements. Several midmarket providers also leverage proprietary and third-party automation platforms to automate most of the manual tasks in any transformation engagements, such as application discovery, migration readiness assessment, roadmap creation, application severity mapping, migrating to the decided landing zones and much more.

With U.S.-based SMEs at a nascent stage of cloud technology adoption compared to mature global enterprises, most migration engagements continue using the lift-and-shift methodology to accelerate the migration process. The SMEs also have comparatively less experience moving to the cloud, with their apprehensions toward securing their data on the cloud covered by the service providers' secure transformation expertise and capabilities. ISG has observed that enterprises are engaging at an increased capacity with the midmarket providers as they offer far better flexibility and agility toward any requirements than large service providers. Enterprises are happy with the outcomes and awarding more contracts to these midmarket providers.

In the U.S., the public cloud **Managed Services for Large Accounts** market has been growing steadily and has the highest share compared to other markets. Per last year's individual research conducted by ISG, we observed that most large global organizations have already started to use two or more hyperscalers (2.4 clouds on average) for different applications, and we believe this trend will scale up considerably. This multicloud ecosystem has created an additional layer of complexity. ISG also saw providers investing significantly in developing next-generation AI- and ML-led automation solutions by leveraging large learning models (LLMs) to predict and identify bottlenecks, improve the accuracy of budgeting and forecasts and enhance the overall operational efficiency. GenAI has been one of the hot topics, and providers have developed several solutions and use cases around this to help clients improve their CX. Based on this research, ISG additionally noted that almost all providers offered FinOps services, which have become table stakes and are increasingly challenging for the service providers to find new ways of optimizing cloud resources and reducing cloud bills.

Apart from the traditional managed services, providers have been developing comprehensive offerings that include automated provisioning and orchestration, service scheduling, cost controls, container management, workflow automation, cloud resource optimization, and more to differentiate the managed public cloud service offerings. Service providers have also started curating industry-specific solutions using their vast experience catering to clients in those industries. This expertise enables them to create customized managed services aligned to particular industry vertical regulations and compliance requirements.

In the U.S., the public cloud **Managed Services for Midmarket** has been growing rapidly. Due to relatively less exposure and experience with cloud technology, SMEs often need service providers to support them in decisions around cloud configuration, security, data lakes and analytics, DevOps automation and cost optimization. Midmarket clients show increasing interest in cloud-native application development frameworks as well. Enterprise clients who find cloud platforms challenging to understand and those who do not have the time to undergo extensive training and certification will most likely find the midmarket service providers as ideal partners to accelerate their agile development toward a cloud-native app development organization. Enterprises continue to demand service providers' support for DevOps automation to enable CI/CD pipeline automation, which prompts the

need to support container utilization. Cost management and cloud resource consumption control have also been prominent in several deals.

The cloud financial management practice has rapidly grown in the last four quarters, and **FinOps Services and Cloud Optimization** are becoming increasingly important for businesses of all sizes. Enterprises often require service providers' assistance to assess options to reduce rising cloud bills. With FinOps services and tools in their managed service offering, midmarket service providers can enable clients to check their multicloud spending, optimize consumption and cloud resources, and reduce cloud waste and bills. As the complexity of managing cloud costs increases, many organizations choose to outsource their FinOps functions to MSPs, with almost all their conversations with clients around FinOps and improving efficiencies. Enterprises also realize the importance of incorporating FinOps practices early in their cloud migration projects for better management and cost optimization. With businesses becoming more accountable for their cloud costs using FinOps, using cloud

resources is more efficient, resulting in better financial outcomes. As a result, the FinOps domain continues to grow with an increasing demand for FinOps practitioners with solid technical skills. This leads to a greater emphasis on training and upskilling within the industry. Based on the recent survey by the FinOps Foundation, the average FinOps team size has grown by 75 percent in the last 12 months, and it is expected to grow by another 50 percent in the coming year. Enterprises are also starting to link their sustainability goals with their FinOps practices, as companies can reduce their environmental impact by optimizing their cloud usage. These trends indicate that FinOps is critical to a successful cloud management strategy. With more businesses migrating to the cloud, the demand for FinOps Managed Services is expected to continue growing.

The **Hyperscale Infrastructure and Platform Services** market continues to be very competitive. Providers such as Amazon Web Services (AWS), Microsoft Azure and Google Cloud dominate the U.S. market, leveraging their extensive infrastructure, advanced technology offerings and wide range of services

to maintain their leading positions. These major players have continued to invest heavily in expanding their global data center footprint and enhancing their service offerings to meet the growing demand for cloud-based solutions. There has also been a continued focus on improving energy efficiency and sustainability in data center operations. This is primarily driven by increasing awareness of the environmental impact of data centers and the need to comply with stricter regulations on energy use and carbon emissions. One of the market's major trends in 2023 is increasing investments into GenAI capabilities, where hyperscalers have developed several services and showcased use cases around GenAI so that users start preferring their cloud infrastructure over others. With cloud providers continuing to distinguish their offerings in 2023, enterprises will have the opportunity to make informed decisions about placing their workloads in the future. With a multicloud strategy, applications can access the best-of-breed services available for their use case, whether an industry-specific cloud solution, a specialized database or an AI and ML service. Despite these ongoing trends, the

IaaS and PaaS market landscape has not seen significant shifts or disruptions over the past year ¬— the same key players continue to lead the market, and the demand for hyperscale services remains strong across various industry sectors. However, with the rapid pace of technological advancement and the ever-evolving needs of businesses, ISG predicts that the market will continue to evolve and grow.

With the recent increase in demand for migrating mission-critical workloads to cloud environments, more enterprises are experimenting with various combinations of cloud and taking significant risks to become more agile. ISG observes enterprises wanting to rapidly move their SAP applications and workloads to the public cloud. Enterprises must also check partner credentials and migration automation tools while choosing their cloud platform to achieve the desired results. The SAP HANA Infrastructure Services provides numerous advancements, especially pertaining to hyperscalers. The top hyperscalers in this space offer automated tools to accelerate RISE with SAP migrations, providing a safe path for hesitating customers and anything that can

help seamlessly migrate SAP workloads to their environments. SAP continues to push the RISE with SAP initiative, accelerating cloud migrations. However, typical SAP clients have more than SAP S/4HANA. They simultaneously use legacy ERPs, analytics tools, data warehouses, sales and service automation, CRM, e-commerce, HCM and other SAP or competitors' products. The U.S. market in this domain remains a battle between AWS and Microsoft Azure. Google Cloud took a price-competitive approach but had limited success. The overall **SAP HANA Infrastructure Services** will almost certainly continue to grow even further in the coming years, where enterprises will slowly move all their large instances and workloads with complex environments to the public cloud environments.

The cloud infrastructure underpins most new technological disruptions. To mitigate the increasing costs and complexity of managing services on major public clouds such as AWS, Azure and Google Cloud, enterprises outsource their transformational and operational activities through the service provider community. They leverage advanced technologies and AI- and ML-led automation to efficiently migrate and manage workloads on the public cloud.

Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

The ISG Provider Lens™ 2023 – Multi Public Cloud Services study analyzes the relevant software vendors/service providers in the U.S. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research™ methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research™ programs, interviews with ISG advisors, briefings with service providers and analysis of publicly available market information from multiple sources. The data collected for this report represent information that ISG believes to be current as of November 2023 for providers that actively participated and for providers that did not. ISG recognizes that many mergers and acquisitions may have occurred since then, but this report does not reflect these changes.

All revenue references are in U.S. dollars ($) unless noted otherwise.

The study was divided into the following steps:

1. Definition of Multi Public Cloud Services market

2. Use of questionnaire-based surveys of service providers/ vendors across all trend topics

3. Interactive discussions with service providers/vendors on capabilities and use cases

4. Leverage ISG's internal databases and advisor knowledge and experience (wherever applicable)

5. Detailed analysis and evaluation of services and service documentation based on the facts and figures received from providers and other sources.

6. Use of the following main evaluation criteria:

   * Strategy & vision

   * Innovation

   * Brand awareness and presence in the market

   * Sales and partner landscape

   * Breadth and depth of portfolio of services offered

   * Technology advancements

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He has authored several white papers, thought leadership articles, briefing notes, blogs and service provider intelligence reports, especially in the next-generation hybrid cloud and infrastructure services domain. Shashank has also delivered several workshops, webinars and podcasts and has been quoted in IT journals.

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He comes with over 9 years of research and consulting experience into IT industry. Prior to this role, he has been associated with several custom market and procurement research firms, in which he has delivered actionable insights and recommendations around market sizing & forecasting, industry level trends and drivers, procurement best practices, sourcing models and strategy, competitive benchmarking, market share analysis and vendor landscape for industry verticals such as IT hardware, IT services, transportation and warehousing.

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Prior to her role in ISG, she has worked on various signature research projects which involved both qualitative and quantitative analysis as well as content creation and contextualization for other market research firm. She has an expertise of working on both primary and secondary research projects and is also associated with other custom and ad-hoc research projects.

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Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a research director, principal analyst and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

About Our Company & Research

ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens™ research, please visit this webpage.

ISG Research™

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ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.

ISG Provider Lens™

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